Introduction

The idea of social capital rose to prominence in social sciences research over the last decade (Isham, Kelly and Ramaswamy, 2002). Broadly it defines as a set of institutions, attitudes, values and relationships which influence the interactions among people and thereby contribute to social and economic development (Grootaert and Bastelaer, 2001). In a very narrow sense it connotes as resources embedded in one's social networks that can be accessed or mobilized through ties in the networks (Lin, 2001). The role of social capital in job market search can be traced back to the early 1960s. Individuals use connections with others, such as friends and social and professional acquaintances to maintain information networks (Stigler, 1962). There are differences among workers in their use of the variety of available informational outlets (Rees, 1966).

A few arguments have emerged from the literature reviewed. Firstly, there appears to be a major gap with respect to systematic studies on the topic of social networks in the labour markets in India. Such a gap exists at industry level analysis too. Secondly, social capital exists at varied levels; individual, neighbourhood, workplaces and community levels. Thirdly, social networks do not have homogenous characteristics. Fourthly, social capital is not an all purpose good. The differences in network features can result in differential outcomes for those who mobilise the resources in these networks. Fifthly, there are benefits as well as downsides of using social capital in the labour market. An understanding of these issues leads us to our research problem.

Statement of Research Problem

Matching a worker with a job is a formidable task for the labour markets and at the same time reflects the efficiency of the labour market. However labour markets are characterized by a certain degree of information asymmetry which leads to the markets being inefficient. Employers are not always able to get the right workers for their jobs because they know too little about the worker characteristics. Similarly, workers too have inadequate information about job opportunities which can make the process of job search costly and difficult. The role of social networks emerges at this juncture. The Information Technology industry hires nearly 35% of its employees through the referral hiring mode perhaps to overcome the problems of asymmetric information and to reduce the frictions that can arise due to imperfect match between workers and jobs. Most firms in the industry maintain and promote an incentive based referral recruitment system which is also publicized on their official

websites. Employee referrals seen from the perspective of companies is the other side of the same coin i.e. the use of social networks to find jobs by job seekers. Since not everybody would succeed in finding jobs through social networks, it was of interest to understand what factors could possibly play a role in finding jobs through social networks.

Another area where social networks could impact the labour market is in explaining wage differentials after controlling for several other variables. Finding jobs through informal networks is expected to explain the variation among earnings among several other factors. This argument stems from the fact that given the information asymmetry with regard to worker characteristics, it seems plausible that firms may be willing to pay higher wages for workers about whom the referrers have given prior information. Therefore, explaining wage differentials exclusively through traditional human capital framework would be inadequate. Another potential area where job search method could impact upon the labour market is in terms of satisfaction that one may experience at work. Given that jobs found through social networks facilitate transmission of intensive and qualitative information about all relevant aspects of work; this could result in better matching of one's skills, experience and educational qualification with the job at hand and thereby lead to better job satisfaction at work place. Thus, while impact of job search method on wages reflects the material returns from a job, its effect on job satisfaction emphasizes the non material rewards from work. From an employer's perspective, since imperfect information exists with regard to understanding worker characteristics, employers in certain industries would prefer referral based recruitment practices due to its merit in giving substantial information about the potential worker. Also, it lowers transaction costs for the firms which can use the networks of its employees as a cheaper screening and signalling mechanism as compared to formal methods of recruitment. Besides the information achieved through these methods are likely to be more reliable for both the employer as well as the employee. However, there are also concerns raised regarding the use of employee referrals as these are considered to be nepotistic practices favouring 'insiders' alone. For instance, hiring through networks of existing employees may not be very beneficial for women if they do not have the same access to influential and powerful networks like their male counterparts. Similarly, certain categories of socially disadvantaged job seekers such as SC/ST or OBC may not get equal opportunities to compete for jobs in the labour market. Hence, it becomes imperative to understand if the use of social networks in finding jobs or filling positions exacerbates inequalities in the

labour market due to the differential nature of networks in the possession of job seekers and job referrers.

Research Questions

a) Does an individual's stock of social capital affect his/her chances of finding jobs through formal or informal methods of search?

b) What factors can explain the differences in earnings and job satisfaction of individuals? Particularly, can finding jobs through social networks explain these differences?

c) Do men and women benefit similarly from the use of social networks? In other words, what are the gender dimensions of mobilizing social networks in the labour markets?

(d) Are social networks always beneficial or do the nature of ties within networks create a difference?

Objectives

1. To examine how social capital characteristics of IT employees relate to the method of job finding.
2. To analyze whether the method of job finding can explain differences in earnings and job satisfaction.
3. To understand the extent of referral hiring in the IT industry and the perceived benefits associated with referral hiring.

Hypothesis

1. Social capital characteristics exert an influence on the method of job finding.
2. Finding jobs through informal methods is associated with higher level of earnings.
3. Informal methods of job finding are positively related to job satisfaction.
4. Perceived benefits of referral hiring are associated with the extent of referral hiring in IT companies.

Research Design

The study is primarily explanatory in nature as it tries to model the determinants of the method of job finding. The explanatory social capital variables are studied at the levels of bonding, bridging and group networks. Subsequently, the study also models the determinants of the level of earnings and job satisfaction. The explanatory social capital variable of interest in the earnings and job satisfaction models is the informal method of job finding. Apart from social capital variables, there are other relevant variables included in the study. The third objective tries to understand the perceptions of HR managers and the extent of referral hiring in the IT industry with simple descriptive statistics. The study has been carried out in Bangalore city which is regarded as the IT capital of India; the population of interest was IT employees and IT firms. Primary data has been collected from IT employees (personal structured interview) and IT firms (online structured interview). Secondary sources of data have been collected from NASSCOM. Other sources of secondary data include books, newspaper reports, journal articles and other reports such as from India Brand Equity Foundation (IBEF) and Confederation of Indian Industry (CII). Non-probability sampling design was chosen for the study due to unavailability of a sampling frame and unwillingness of HR managers to support the survey. The sample consisted of 281 IT employees and 25 IT firms. Maximum variation purposive sampling methodology was followed to select the respondents from various companies. This was done to get an adequate representation of employees across experience, skill, educational and occupational categories. The IT firms were also chosen purposively since only HR managers in senior positions would have been capable of providing the required information. Therefore, only those companies where HR managers were willing to share information and participate in the survey could be included. The first objective has been analyzed with the help of a multiple logistic regression method where the method of job finding is the dependent variable. The second objective uses an OLS regression model and a multiple logistic regression model for analyzing the determinants of earnings and job satisfaction respectively. There were three model specifications under each. Descriptive statistics showing important cross tabulations has been shown for all three objectives to add value to the interpretations. The software used for analysis is STATA.

Summary of Findings

Social capital characteristics particularly bonding social capital characteristics play an important role in influencing the method of job finding through informal methods of search

controlling for all other variables. Strength of tie proposition of Granovetter (1973) was found to be partly relevant when bonding social network characteristics were analyzed. Age and type of company were the only non- social capital factors capable of predicting the method of job finding after controlling for all other variables. A one unit increase in age was estimated to increase the likelihood of finding jobs through informal methods. As compared to software product companies, workers employed in companies that are diversified into software products and software services have a lower likelihood of finding jobs through informal methods.

With respect to earnings the informal method of job finding exerted a statistically significant positive influence on annual earnings in the first earnings model. Human capital variables which exerted a statistically significant influence on earnings are skill, education, experience and designation. Interaction effects between skill level of job and method of job finding after controlling for other variables revealed that finding jobs through informal networks for high skilled jobs is associated with a decrease in average annual income as against low skill jobs found through informal methods. In the second model specification where only respondents who found jobs through informal methods were considered, strength of tie as measured through the source of contact was found to be statistically insignificant. Thus, strength of tie proposition by Granovetter (1973) could not explain differences in earnings. Strength of position proposition by Lin (2000) seemed to be relevant in explaining earnings differentials as it was found to be statistically significant. In the third earnings model where strength of tie was measured through the composite index, it was once again found that strength of tie did not exert an influence but strength of position exerted a statistically significant positive influence on annual income. Age, skill and designation were statistically significant predictors of annual income in both second and third earnings model. Type of company and ownership of company were statistically significant in explaining earnings in the third earnings model while only type of company was significant in the second earnings model. In the job satisfaction models, the first model showed that informal method of job finding is associated with lower levels of job satisfaction after controlling for all other variables. Apart from that, only skill level of job and type of company were seen to be significantly impacting job satisfaction. Gender was a statistically significant predictor of job satisfaction in the second and third model where women were associated with lower levels of job satisfaction.

The final part of the study focused on the demand side of the labour market where perceived benefits of referral recruitments were examined through the views of the HR managers. The

results revealed that there is a high level of agreement among HR managers with respect to the pre-hire benefits of referral hiring. These relate to more appropriate resumes, better information about the nature of job, a higher acceptance rate of job offers and substantial cost savings to the company. However, with respect to cost savings, it may be said that a combination of pre-hire and post-hire consequences can result in cost savings. There was comparatively lower level of agreement on post hire consequences of referral hiring such as referred workers displaying similar professional ethics and characteristics or reporting lower turnover rates than non-referrals. The test of association between perceptions about referral hiring and the extent of referral hiring was also conducted. The results showed that if employers believed that referrals exhibited a higher level of understanding of the job content than non-referrals, it would be associated with more referral hires.

Policy implications

Considering that a good percentage of job seekers' get jobs through social networks and nearly 35% of recruitments take place through the referral hiring mode (NASSCOM), it is important to understand what governs their use in the labour market and the consequent outcomes associated with it. The study was a modest attempt to examine the same. It is not feasible at this point to generalise whether use of social networks as seen from a job seeker's perspective or employee referrals from the employers' perspective are good or bad for the labour markets. One of the biggest criticisms levelled against the use of referrals has been the 'inbreeding bias' which gives repeated opportunities for certain category of people while excluding the others from effectively competing for available jobs. This bias takes place when those who are already employed refer friends to available positions in the organisation on the considerations of age, sex, caste or language. The problem would be less pronounced if the industry has an adequate representation of different socio-demographic categories of people. But if some categories have a higher representation than others, it could accentuate the inbreeding bias if the pre-dominant hire mode happens to be through referrals. Another important aspect is that even within various socio-demographic groups there could be differences in pool of network resources that people possess. Since not everybody is endowed with the same amount of social contacts, some may get left out in an industry which hires a substantial number of people through referral mode.

Significance of the study

Indian software industry has emerged as a major player in the global software industry. However, it occupies only a marginal position in the world market and Indian exports have been largely low value output. In order to compete in the high value segment there is a need to focus on issues of labour and its competitiveness. One such issue concerning the competitiveness of labor is the efficiency and effectiveness relating to job search. The study showed that social networks of existing employees can serve as important resources for firms to hire through referrals. This can reduce costs and lower informational problems for firms. Job seekers too can benefit if they can execute successful job searches through personal contacts. However, filling up vacancies through referrals could also mean that some people do not get a chance to effectively compete for jobs in the labour market resulting in a kind of bias that favours only some people. This study is significant in terms of influencing changes in companies' policies as well as job search behaviour of employees with respect to use of referrals or social networks in the labour market since it tells us who benefits from the use of social capital the most. It gives us a nuanced understanding of the potential benefits and dangers of using social capital in the labour market. More importantly, it helps us to realize that social capital is not an all purpose good and does not yield similar result for all people in all circumstances. Besides, studies on social capital in India have been mostly on examining the role of social capital in influencing community outcomes such as environmental conservation or poverty reduction. The current study becomes important from the viewpoint of actual and perceived influence of social capital on labour markets which is relatively unexplored in present studies.